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CLAIM LISTING:

1. (Currently amended) An erosion-resistant article comprising:
~~a support selected from a silicon carbide support, an aluminum-silicon carbide support and a zirconium alloy support; and~~
an oxide coating comprising yttrium disposed over said support, wherein said support and said oxide coating have material compositions that differ from one another in coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$, and wherein said erosion-resistant article is a plasma process chamber component.
2. (Original) The erosion-resistant article of claim 1, wherein said material compositions differ from one another in coefficient of thermal expansion by no more than $3 \times 10^{-6}/K$.
3. (Original) The erosion-resistant article of claim 1, wherein said material compositions differ from one another in coefficient of thermal expansion by no more than $1 \times 10^{-6}/K$.
4. (Currently Amended) ~~The erosion-resistant article of claim 1, wherein said support is~~
An erosion-resistant article comprising:
an aluminum-silicon carbide support; and
an oxide coating comprising yttrium disposed over said support, wherein said support and said oxide coating have material compositions that differ from one another in coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$, wherein said erosion-resistant article is a plasma process chamber component.
5. (Canceled)
6. (Canceled)
7. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is an yttria coating.

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8. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said oxide coating further comprises aluminum.
9. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is an yttrium aluminum garnet coating.
10. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, further comprising an intermediate region between said oxide coating and said support, wherein said intermediate region, said support and said oxide coating have material compositions that differ from one another in coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$.
11. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said component is a chamber wall component.
12. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said component is a ring-shaped component.
13. (Original) The erosion-resistant article of claim 12, wherein said ring-shaped component is a process kit component.
14. (Original) The erosion-resistant article of claim 13, wherein said ring-shaped component is a focus ring.
15. (Original) The erosion-resistant article of claim 13, wherein said ring-shaped component is a capture ring.
16. (Original) The erosion-resistant article of claim 13, wherein said ring-shaped component is an insert ring.
17. (Currently amended) The erosion-resistant article of ~~claim 1~~ claim 4, wherein said component is a dielectric window.

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18. (Currently Amended) ~~The erosion-resistant article of claim 1,~~ An erosion-resistant article comprising: wherein said
a support is formed from aluminum-silicon carbide; and
wherein said an oxide coating is selected from yttria and yttrium aluminum garnet, wherein
said support and said oxide coating have material compositions that differ from one another in
coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$, and wherein said erosion-resistant
article is a plasma process chamber component.
19. (Original) The erosion-resistant article of claim 18, wherein said plasma process chamber component is selected from a focus ring, an insert ring, a capture ring, a chamber wall component and a dielectric window.
20. (Previously presented) A method of making an erosion-resistant article comprising:
providing a support; and
providing an oxide coating comprising yttrium over said support by a process in which a powdered composition is sintered, wherein said support and said oxide coating have material compositions that differ from one another in coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$, and wherein said erosion-resistant article is a plasma process chamber component.
21. (Canceled)
22. (Canceled)
23. (Canceled)
24. (Previously presented) The method of claim 20, wherein said support is an alumina support, and wherein said oxide composition is selected from yttrium oxide and yttrium aluminum garnet.

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25. (Canceled)

26. (Previously presented) The method of claim 20, wherein said process comprises a hot pressing step.

27. (Previously presented) The method of claim 20, wherein said process comprises a dry pressing step and a sintering step.

28. (Previously presented) The method of claim 20, wherein said support is also provided by a process comprising at least one sintering step.

29. (Original) The method of claim 28, wherein said support is formed from a powdered raw mixture comprising alumina particles and said oxide coating is formed from a powdered raw mixture comprising (a) particles of yttrium oxide, (b) particles of yttrium aluminum garnet, or (c) particles of both yttrium oxide and aluminum oxide.

30. (Currently amended) An erosion-resistant article comprising:

a support selected from an aluminum-silicon carbide support and a zirconium alloy support;
and

a sintered-powder oxide coating comprising yttrium disposed over said support, wherein said support and said oxide coating comprising yttrium have material compositions that differ from one another in coefficient of thermal expansion by no more than $5 \times 10^{-6}/K$.

31. (Previously presented) The erosion-resistant article of claim 30, wherein said material compositions differ from one another in coefficient of thermal expansion by no more than $3 \times 10^{-6}/K$.

32. (Previously presented) The erosion-resistant article of claim 30, wherein said material compositions differ from one another in coefficient of thermal expansion by no more than $1 \times 10^{-6}/K$.

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33. (Currently amended) The erosion-resistant article of claim 30, wherein said support is an ~~aluminum-oxide~~ aluminum-silicon carbide support.

34. (Previously presented) The erosion-resistant article of claim 30, wherein said oxide coating is an yttria coating.

35. (Previously presented) The erosion-resistant article of claim 30, wherein said oxide coating further comprises aluminum.

36. (Previously presented) The erosion-resistant article of claim 30, wherein said oxide coating is an yttrium aluminum garnet coating.

37. (Previously presented) The erosion-resistant article of claim 30, wherein said component is a chamber wall component.

38. (Previously presented) The erosion-resistant article of claim 30, wherein said component is a ring-shaped component.

39. (Previously presented) The erosion-resistant article of claim 30, wherein said component is a dielectric window.

40. (Previously presented) The erosion-resistant article of claim 30, wherein said support is a sintered-powder support.

41. (Currently amended) The erosion resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is a physical vapor deposited coating or a chemical vapor deposited coating.

42. (Currently amended) The erosion resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is a thermal sprayed coating.

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43. (Currently amended) The erosion resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is a plasma sprayed coating.

44. (Currently amended) The erosion resistant article of ~~claim 1~~ claim 4, wherein said oxide coating is a sintered-powder oxide coating.